Another Dimension to Explicating Relationships:

Communication Networks Theory and Method for Measuring Inter-Organizational

Linkages

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Abstract

There is increasing interest in the ways that public relations is used to create and change relationships between publics and organizations. This paper introduces network analysis as a way to theorize about another dimension of relationships, inter-organizational relationships. Through a case study of inter-organizational relationships in the civil society movement in Croatia, this paper outlines the various ways public relations functions as a relationship building function. Through the use of network analysis, we are able to propose a model of how organizations should work together to successfully achieve their common goal to build and maintain civil society. The model proposes a public relations approach to understanding inter-organizational relationships.

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The essence of a democratic philosophy is that individuals are safe from violence,

persecution, and oppression. Ideally, people can articulate their needs to their governments and

citizen voices are heard. Unfortunately, citizens in many nations have little power to participate

in their own governance. Although the political situation in many nations is improving, (consider

democratic reform in Indonesia, Mexico, Russia, and the Ivory Coast), there are still too many

nations lacking societal structures that allow common citizens to voice their opinions on social,

economic and political matters. What is missing in many parts of the world is *civil society.*

Civil society is a term that describes how a society functions. In a civil society, there are

institutions and organizations that mediate the relationship between government and the people

(O'Connell, 2000). Civil society can be understood as a public relations function because,

> Public relations, through its focus on media relations and relationship building, is an
>
> integral part of the civil society function. Civil society organizations need to reach
>
> various publics with information and create links between like-minded groups. Public
>
> relations in general, and media relations in particular, can help civil society organizations
>
> speak to and listen to relevant publics. (Taylor, 2000a, p. 3)

Civil society is part of the nation building process. It differs from nation building because

nation building has traditionally referred to the formation of political institutions such as political

parties. In contrast, civil society encompasses all facets of a society including work, economics,

politics, education, religion, and social causes. Civil society is a prerequisite for nation building.

Civil society is both a noun "America is a civil society" as well as an adjective that reflects how things operate in everyday life, "civil society organizations are meeting to discuss societal problems."

This is an appropriate time to begin to study civil society within a public relations framework. First, the topic of nation building has gained increased attention in the public relations literature (Scanlon & VanSlyke Turk, 1999; Taylor, 2000a; b). However, much of this attention has focused on the one-way relationship between governments and publics. Second, there has been a new and important emphasis on further explicating the term relationships in the public relations literature (Broom, Casey & Ritchie, 1997; Huang, 2001; Ledingham & Bruning, 1998, 2000). The recent turn to a more mutual approach to relationships in public relations is in contrast to the sender-receiver model of communication that guided communication theory in the early years of the field. The ability to operationalize, theorize and measure different kinds of relationships is now possible.

The purpose of this paper is to introduce network analysis to public relations scholars and practitioners as an additional way to understand one type of relationship -- inter-organizational relationships. Network analysis provides insight and specific descriptive characteristics regarding the mutual relationships among people, groups, or organizations. For example, in trying to understand the collective assessments of various partners in a system and the extent to which they impact system outcomes, research has shown that more visible, active, and effectively connected organizations emerge as leaders and valued participants in the system (Doerfel, 1999; Mizruchi, 1993; Mizruchi & Galaskiewicz, 1993). To illustrate network analysis as a way to theorize and measure inter-organizational relationships, we provide a case

study of a civil society movement in Croatia. Specific to civil society, network analysis of these

Croatian organizations that share common goals (civil society) can represent a model of how to

work together in civil society enactment and retention. By identifying the map of collaborative

relationships (networks) that lead to outcomes like civil society, we provide a model of how

organizations in other nations might work together and foster relationships that can build toward

and result in civil society.

   To contextualize civil society and nation building, the first section of this paper will

briefly review the nation building literature and civil society to situate this area of research in

public relations. In the second section of this paper, the theory and method of network analysis

is outlined. The third section shows how network analysis can help us understand how a

network of interrelationships work together to foster civil society. From this structural

perspective, then, the final section offers a prescription of who should work with whom and to

what extent in achieving positively productive and mutually beneficial collaborative relations.

The final section discusses the implications of the model for future public relations research in

explicating relationships.

<div style="text-align:center">Nation Building and Civil Society</div>

   Taylor's (2000b) review of the nation building literature revealed that it was the field of

political science that has most clearly described the relationship between nation building and

communication. Political scientists are split between two schools of thought: primordialist and

integrationist. The primordialist approach is most often associated with anthropologist, Clifford

Geertz, and political theorist, Walker Connor. Geertz (1963) first described primordial

sentiments as competing loyalties between groups. Primordialists argued that increased channels

of communication—radio, print, and television— in developing nations ended historical isolation of ethnic groups. Thus, when previously unrelated people received mediated communication messages about local and national issues, they realized the differences between themselves and the other groups. This created the grounds for enacting protection (Connor, 1972, 1992).

A contrasting view of the role of communication in nation building can be found in the writings of Karl W. Deutsch (1966a; b). Deutsch (1963) saw the nation as the product of individuals and small groups sharing common social communication habits. For Deutsch, the social integration of individuals, groups, associations, and institutions was directly related to communication channels. Rather than the media acting as a way for groups to be reminded of their competing differences, communication that transferred information from one group to others had the potential to build the relationships necessary for attaining national goals. Deutsch argued that a nation is created and maintained by the competency of a government to communicate to its citizens (Deutsch, 1963). Mediated communication channels such as print, radio, television, are used to create a collective consciousness that leads to national integration. The communication channels are most often state controlled and this, of course, will influence the tone and content of the media.

How does this social integration of individuals, groups, associations, and institutions occur? Both primordialists and integrationists would argue that communication channels such as media are the factor that most influences nation building. This paper argues for a different perspective. It posits that the foundation of nation building is in the development of interpersonal and inter-organizational relationships. Nation building is based on civil society

relationships. The next section of this paper explores the different relationships that make up a

civil society and contribute to nation building.

Formulating a Public Relations Model of Civil Society

Models are important steps toward developing theory and the field of public relations

has been guided by models for over 20 years (e.g., Grunig & Hunt, 1984). According to Grunig

(1992), there are two types of models in public relations. Positive models describe public

relations practices as they occur. That is, positive models reflect the actual practices and

assumptions of practitioners. Normative models provide an idealized way of looking at a

phenomenon. A normative model suggests what something would look like in its best practice.

The model proposed here is a normative model that identifies the partners and relationships in

the ideal civil society situation. The model that emerges from the network analysis at the end of

the paper will be a positive model of actual civil society development.

A public relations model of civil society draws on the relational public relations research

(Broom et al., 1997; Huang, 2001; Ledingham & Bruning, 1998, 2000) and views the strength (or

weakness) of a civil society in the relationships between partners. The first step in creating a

theoretical model is to define the components of the model. In this normative public relations

model of civil society, there are seven partners, three levels of interaction, and cooperative, and

even sometimes competitive, relationships between the partners.

The Partners

Citizens. The foundation of civil society is the public. Civil society is premised on an

informed and empowered public. In a civil society, the public has the right and, more

importantly, the desire to participate in local, regional, and national decisions. Moreover, the

public feels safe when participating in all levels of community decision-making. An appreciation

of civil society begins in early education and continues throughout the life span. Unfortunately,

in the public sphere, individual voices of citizens are not often heard. Thus, one of the best ways

for citizens to articulate their needs is through participation in societal institutions.

Institutions. Societal instructions such as religious organizations, professional groups

(associations of doctors, lawyers, educators), universities, unions, and political parties are

necessary in a civil society. These institutions provide a means for citizens to articulate their

needs. Legitimate institutions have the power to speak out on issues and because they are

respected, their positions on issues are valued. Civil society characterizes all efforts by "private

and public associations and organizations, all forms of cooperative social relationships that

create[d] bonds of trust, public opinion, legal rights and institutions and political parties that

voice public opinion and call for action" (Alexander, 1998, p. 3). In a civil society, institutions

must operate at all levels of the society. Institutions gain influence when they cooperate with

the media and help set the public agenda.

Independent media. There is a continuum of press freedom around the world. Some

media outlets are state-run while other nations have a free and independent media. The value of

an independent media to civil society is clear because the media, in general, perform an important

function in civil society. They disseminate factual information that people use to make

decisions. Moreover, because of the agenda setting function of the media, they are opinion

leaders on key topics. The media also serve as watchdogs to ensure that government officials and

businesses are held accountable for their actions. The media are "the most critical of all civil

society institutions" because they allow for communication between institutions, organizations, the government, and the public (Shaw, 1996, p. 31).

Non-governmental organizations and social cause groups. In the United States there is a social cause group for almost every issue. Groups organize to protect the environment, children, animals, consumer safety, women's rights and minority issues to name a few. In other nations of the world, especially in societies that have been dominated by repressive governments, there is no tradition of social cause groups acting on behalf of social issues. Today, there is an emergence of non-governmental organizations (NGOs) throughout the world. These grass roots organizations work on behalf of issues, often through the media, but they are not part of the formal governmental structure. NGOs are organized groups of individuals, some small and others quite large, that are not yet institutionalized. However, some NGOs will become institutionalized as their value to the society becomes clear.

International donor organizations. Another important part of a civil society is the assistance and mentoring provided by international organizations (INGOs). One trend for the international non-governmental community is to extend their humanitarian efforts into the political arena. In developed nations, international organizations that operate on behalf of larger, social causes may include Freedom Forum, Amnesty International and Greenpeace. These watchdog groups are crucial because they provide an external perspective on the situation in a particular nation. In developing or post-crisis countries, the United Nations, the United States Agency for International Development (USAID), and the George Soros Open Society Institute (OSI) provide financial and human resources to help facilitate development. These international organizations fund local groups who work to achieve societal goals. INGOs are especially

important during the initial stages of civil society because they work directly with indigenous organizations and provide important training and activating of local civil society leaders.

Local business community. The business community also has a role to play in the development of civil society. Business organizations have opinions on issues such as regulation, licensing, access to natural resources, price controls, immigration laws and legal reform. Their voices must also be included in civil discussions. However, too much influence from this group may impede civil society development. The emergence of professional business associations performing such roles as the Better Business Bureau, The Chamber of Commerce and the Rotary Club are an important step in ensuring civil society.

Governance. The final partner in civil society is governance—the local, regional and national leaders. Government leaders, as well as members of the bureaucracy that support government, need to be accountable to the aforementioned partners. Government leaders need to carefully monitor public opinion and be willing to adapt to changing public needs. In a true civil society, government understands important issues and resolves them in a manner that benefits the nation and the people.

These seven partners create the foundation of civil society. While each partner has its own issues, its own needs, and will represent different citizen interests, it is the goal of civil society to have inter-related objectives among these different groups. When the interests of two or more partners converge, then there is a much greater opportunity for those groups to achieve their goals. An effective civil society rests in the intersection of all of these partners' interests. Indeed, it is in this intersection of interests that the role for public relations becomes most clear.

Public relations, with its ability to create, maintain, and change relationships is the appropriate way to study civil society development.

An important implication of these seven partners is that the structure of civil society is not hierarchical. The individuals who make up these several groups often share dual membership among groups. For instance, a lawyer may also be a parent in the Parent Teacher Association as well as a member of a religious organization. The businessperson may serve as an elected officials and work to protect the environment. By looking at civil society from the group level, it is evident that civil society structure is the antithesis of the centralized hierarchy in which power is reserved for the elite few. In this normative model of civil society, the citizens are an equally powerful entity because of their participation in the various groups. An additional element to this model is the liaison role that the government, media, NGOs, institutions and international donor organizations play in the global milieu.

Relationships Among Partners

The existence of these seven partners is necessary for the development and maintenance of civil society. However, their presence is not sufficient for civil society. Relationships between the partners are needed to fully leverage the potential of each group. Interactions between the partners create a synergy that multiplies the reach and effectiveness of the partners. Face-to-face communication, media relations, and inter-organizational relationships facilitate the interactions. While all seven partners should be engaged in regular communication and coordination, three sets of interactions in particular are crucial to civil society—the NGO-inter-organizational relationship, the NGO-media relationship, and the NGO-donor relationship. Each interaction is discussed below.

NGO inter-organizational relationship. The facility through which a citizen can find, join or obtain services from a non-governmental organization is an indicator of civil society. Individuals often feel that they have little power to influence their local community and an even smaller chance to influence national issues. However, the creation of non-governmental organizations that work to articulate citizen concerns helps to bring important issues into the forefront of public discussion. Relationships among the NGOs in a civil society movement must exist. These relationships, developed through communication and nurtured by trust and cooperation, are necessary. When single-issue groups join together on larger social or political issues then the individual voices of the citizens are heard. It is then that outcomes can be maximized.

NGO-media relationship. The NGOs, however, cannot help solve citizen problems unless they have established cooperative relationships with local and national media. NGOs need a clear strategic plan to maintain media relations and to create new media relationships. Without press coverage on their issue, NGOs may have very little impact in public opinion and community action. NGOs should train their members in media relations in order to maximize the impact of their actions. The NGO-media relationship makes sense-- the media need news content and one of the best ways to create the information subsidy (Gandy, 1982) is to have a cooperative relationship between media and NGOs. The outcome is beneficial to both parties—the media gain reliable information that is pertinent to its audiences and the NGOs gain the opportunity to explain their cause and objectives to broader audiences.

NGO-donor relationship. Perhaps the most important relationships to negotiate is the NGO-donor relationship. Many governments are unresponsive to the needs of their

constituents. Citizens alone may have little influence on national level politics but, through

NGOs that are supported by international donors, they can have influence over local governance.

Indeed, civil society is premised on local accountability, transparency, participation, and citizen

influence over local decision-making. These values are part of the global civil society movement.

With international donor assistance during the early years of civil society initiatives, NGOs can

become equal partners with government and this partnership is pivotal to civil society

development. However, the NGO-donor relationship is subject to all sorts of problems. INGOs

have been known to have too much influence over NGO actions and too much direction can

destroy the credibility of indigenous movements (USAID, 2000).

Measuring Relationships

The final area of discussion of civil society is the explanation of the role of public

relations in this model. Public relations as a relationship-building function and as a strategic

communication function must be at the center of the civil society process. Public relations is

suitable for understanding and measuring inter-organizational relationships in civil society

because of its focus on relationships. Each of the seven civil society partners can enter into a

relationship with the other partners as they participate in fostering civil society. Public relations

informs these reciprocal relationships. For instance, citizens can mobilize around issues and

protest, boycott, or march in solidarity for important issues. Institutions and NGOs provide the

information subsidy to the media on relevant social issues. International non-governmental

organizations can mentor indiginous NGOs to help them become more focused, or socially active.

Business groups can partner with NGOs or institutions to sponsor events or endorse issues that

benefit all citizens. And, of course, government officials who listen to the voices of civil society will be in a much better position to serve their consituents.

It is in the reciprocal relationships that this proposed public relations model of civil society can be tested and further refined. Recent research by Broom et al., (1997), Ledingham and Bruning (1999, 2000), and Huang (2001) has helped shape the future of public relations research. Within a relational approach to public relations, the existence and strength of relationships becomes the focus of study. Civil society is premised on inter-organizational relationships among various societal partners and a public relations model of civil society allows us to understand how cooperative relationships help shape, change, and sustain a nation.

How can we as public relations scholars better understand inter-organizational relationships? The next section offers an explanation of the theory and method of network analysis, illustrates inter-organizational relationships in a civil society movement, and argues that this type of theory and analysis provides an additional method to measure relationships in public relations.

<div align="center">Theory of Network Analysis</div>

History of Network Analysis

All organizations, whether for-profit or not-for-profit, operate in networks. Organizations join trade associations, federations, and other professional umbrella groups to influence their environment. The above discussion on civil society emphasizes relationships among the various groups and how building such relations drives a civil society movement. And at the very core of network analysis is identification of relationships and the resulting power, influence, and dominance of actors [organizations] in the context of the greater system (Boje &

Whetten, 1981; Burkhardt & Brass, 1990; Galaskiewicz, 1979). That is, network analysis

provides a context for relationships by identifying communication flows and system structure

that can offer insight to the network members' understanding of organizational prominence,

influence, and power (Mizruchi, 1993). When organizations act in networks, they rely on many

of the tenets of public relations--reputation management, media relations, strategic

communication, and relationship management.

 Relationships among individuals. The study of communication relationships using a

network analysis approach dates back to as early as the 1920s when Mayo and his colleagues

studied the patterns of communication among workers in the *Bank Wiring Room*. Their research

on employee relationships at the Hawthorne Electric Plant first showed how communication

networks could influence work (Molina, 2001). As organizational scholars' thinking evolved,

they adopted a systems paradigm (Buckley, 1967) in which organizational relationships were

seen as inter-related and having structural qualities. This structural approach can be found in

anthropology, sociology, political science, behavioral psychology, as well as communication, and

is defined by the analysis of patterns of relations among actors in a system (Barnett & Rice,

1985; Monge & Eisenberg, 1987; Rogers & Kincaid, 1981). The use of network analysis has

become the means by which scholars are able to depart from traditional linear models of

communication to more holistic, process-oriented conceptualizations of organizational

relationships. It is this holistic and process-oriented approach that naturally complements the

needs of public relations managers in strategizing and fostering inter-organizational relationships.

 Predating network analysis, sociograms were used to map out the structure of small

groups of people working together (Bavelas, 1948). Such rudimentary versions of networks

were also used to make sense of group interaction (Lewin, 1936) and communication flows, like

in Milgram's 1960s research commonly known as "Six degrees of Separation." Since then,

several subdisciplines of network analysis have emerged, including intra-organizational (inside

organizations) and inter-organizational (among organizations) approaches. Organizational

scholars in both communication and public policy disciplines, for example, have developed

network models that predict employee turnover (Krackhardt & Porter, 1985, 1986) and coping

behaviors after massive layoffs (Susskind, Miller, & Johnson, 1998). Others have adopted a

network approach to studying the diffusion of innovations (Rogers & Kincaid, 1981), the

emergence of shared meaning (Barnett & Rice, 1985; Kincaid, Yum, Woelfel, & Barnett, 1983),

the beneficial results of being connected to others, in such works known as 'the strength of weak

ties' (Granovetter, 1973) and later, the 'strength of strong ties' (Krackhardt, 1992), and power

and influence in and among organizations (Brass, 1984; Brass & Burkhardt, 1992; Krackhardt,

1990; Pfeffer, 1981). All of the above studies considered the network of relationships among

people and/or organizations and the effects of associated social connections on various aspects of

organizational life.

    Relationships among organizations. At the inter-organizational level of analysis, network

analysis has also been used to make sense of the nature of a network, organizational connections,

and subsequent effects. As we moved from an industrial to a post industrial/information driven

economy, we have seen new organizational forms like network organizations (Miles & Snow,

1986). Galaskiewicz and Krohn (1984) recognized the emerging nature of inter-organizational

networks such that organizations are no longer free standing entities; rather, they are anchored in

networks of resource transactions. This trend has led to an environment in which "various

components of the network recognize their interdependence and are willing to share information, cooperate with each other, and customize their product or service—all to maintain their position within the network" (Miles & Snow, 1992, p. 55). Similarly, Eisenberg et al. (1985) argued from a communication perspective that for organizations to cope with their environments, they forge links with other organizations which ultimately help participating organizations cope with uncertainty.

Inter-organizational structures, then, have a rich – though recently developed – history of studying the tension between competition and cooperation among often mutually reliant organizations (Beije & Groenewegen, 1992; Burt, 1982, 1992). In their review of inter-organizational network research, Mizruchi and Galaskiewicz (1993) found that a network conceptualization has enabled richer understandings of inter-organizational power and strategies that decision makers use. Research that employs network analysis provides an understanding of the structure of relationships and how that structure informs and enables prediction regarding such outcomes as cooperation versus competition, power, social influences, and uncertainty reduction (Burt, 1992; Krackhardt, 1992; Mizruchi, 1993; Mizruchi & Galaskiewicz, 1993; Pfeffer & Salancik, 1978; Rice, 1993). All of these concepts are valuable for furthering the development of public relations theory and research.

Centrality is a function of an organization's strategic communication with its competitors/cooperators. For example, Friedland, Barnett, and Danowski (1988) found that the more central an organization was in its inter-organizational network, the more successful it was. In addition, they found that more central organizations had a more positive image among the investment community (Friedland et al., 1988). This corroborates with earlier findings that

found greater network centrality to be related to better reputations and greater organizational influence (Galaskiewicz, 1979). Similarly, we propose that research on civil society partners' networks will inform 'ideal' inter-organizational relationships that can affect civil society outcomes.

In their comprehensive review, "Emergence of communication networks," Monge and Contractor's (2001) reference list includes over 400 articles, books, and chapters associated with the theory and practice of social network analysis and organizational communication. The study below focuses on a few core theories that most directly apply to the study of civil society, namely structural holes and resource dependence theory. In order to best explain these theories, the following section provides a general understanding of the related network analysis vocabulary as it relates to public relations.

<div align="center">Methods</div>

Network Terminology and Concepts

In order to apply network analysis to public relations and measuring inter-organizational relationships, scholars must learn the terminology of the method. Mathematical analyses of the network of relations yield such system and organizational descriptions as *centrality* and *structural holes*. Since network analysis relies on mathematically sophisticated algorithms based on matrix algebra, there are various computer software packages that calculate the values of structural holes and centrality e.g., Burt's STRUCTURE; Borgatti et al.'s UCINET).

Centrality and resource dependence theory. The concept of centrality identifies the extent to which an organization shares connections with others relative to the set of organizations as a whole. There are several types of centrality including *degree* and *betweenness* centrality (for

an extended discussion of all centrality types and their relevant measures, see Freeman, 1979).

Degree centrality is a measure of the extent to which a focal organization has the most

communication partners relative to others in the system. Degree centrality is a way of measuring

the extent to which an actor or organization is in the thick of things (Freeman, 1978). The more

organizations one collaborates with, the greater that focal organization's degree centrality will be.

Betweenness centrality is a measure of the extent to which an organization is central in the

system – not because that organization has many connections – but because organizations who

have high betweenness centrality connect groups of organizations. In other words, an

organization with high betweenness centrality has effective contacts and thus serves a liaison

type role between organizations. It is important to recognize that the value of one organization's

betweenness centrality is relative to the betweenness centralities of other organizations in the

system, as each organization's value is calculated relative to its connections with others. Simply

put, betweenness centrality is seen as the extent to which a focal actor or organization is a go-

between for other organizations.

Public relations scholars can understand network analysis by revisiting an organizational

environment theory known as resource dependence theory. Two key variables of resource

dependence theory are organizational uncertainty and interdependence (Euske & Roberts, 1987;

Pfeffer & Salancik, 1978). Scholars have shown that centrality is positively associated with

inter-organizational prominence, influence and power (Boje & Whetton, 1981; Friedland et al.,

1988; Galaskiewicz, 1979; Mizruchi, 1993). Consistent with what resource dependence theory

predicts, in their study on organizational federations, Flanagin, Monge, and Fulk (2001) found

that centrality and formative investment in a federation were positively related and that the more

central organizations were sought out for advice that was unrelated to the federation. In other words, the central organizations in the Flanagin et al. study were perceived to have valued information on a wide range of topics. Such research implies that there are invisible benefits (i.e., not necessarily money-driven; but rather, information-driven) related to having more centralized connections in a network. This is important for public relations strategists to understand as they work through media relations to position their organization at the top of an industry.

Structural holes. Another key concept is structural holes. It is both a theory and a measure developed by Burt (1992) in which the measure calculates the extent to which system members have efficient and effective network connections. Burt (1992) theorizes that a balanced system is one in which the links among its members are not too redundant, but also, the links in the system connect its members such that communication flows throughout it. He argues, "balancing network size and diversity is a question of optimizing structural holes. The number of structural holes can be expected to increase with network size, but the holes are the key to information benefits" (Burt, 1992, p. 67). Put another way, Burt recognizes that the bigger a system (i.e., the greater its membership numbers), the more likely there will be missing connections (holes) among various members. Thus he argues that connections must be strategic so that we can, at the very least, have indirect links to others in the system.

This discussion of network analysis history, concepts, and theory should illuminate the natural complement between civil society and relations among organizations who might contribute to civil society formation and maintenance. Understanding the dynamic network of the system provides specific ways to plan and strategically build relationships. The theory and analysis of inter-organizational network structures provides a robust understanding of the

holistic and dynamic nature of collaborative efforts among sets of organizations. Public relations scholars and practitioners can learn how to use this additional method and theory to understand and strategize the building of inter-organizational relationships. Taken together, the characteristics of the nature of connections among members of a system, including degree centrality, betweenness centrality, and structural holes, enables a model of collaboration for participants to better facilitate goals achievement.

The Network Analysis Tool

Not only will this theory and method help for-profit organizations, it can also be used to understand linkages between not-for-profit organizations. Thus, we propose that civil society as a public relations function can be theoretically and methodologically couched in communication networks. Through network analysis we can understand measurable characteristics of an inter-organizational system with the network variables (centrality, structural holes). Thus, we can better strategize future relationship building efforts. In other words, this approach underscores the earlier argument that civil society organizations are a necessary part of building civil society, however, their mere existence is not sufficient. It is the relationships these organizations foster among themselves that multiplies and enables their ability to attain their shared goals.

The case study below describes the results of a network analysis of Croatian organizations (NGOs, donor, and governmental and independent media organizations) and proposes a network model for what inter-organizational efforts might look like for achieving civil society. It integrates the qualitative description of the three inter-relationships that are the focus of this paper, namely, (1) Inter-NGO Relationships; (2) NGO-Media Relationship; and (3) NGO-Donor Relationship, with the technological terms of network analysis.

Case illustration. One of the most successful civil society movements in the last decade

occurred in Croatia from 1998 to the present. Croatia, once part of the Federal Republic of

Yugoslavia, gained its independence in 1991 and then suffered enormously in the civil war that

followed. After the war ended with the signing of the Dayton Peace Agreement in 1995, dozens

of humanitarian organizations and INGOs started funding civil society initiatives. Their goal was

to foster political change in Croatia before its nationalist leaders could once again destabilize the

entire region. Through the monetary and mentoring support of USAID, Soros, the British Civil

Society Initiatives, and the European Union, a civil society movement emerged in late 1997. This

network of organizations reached its peak during the parliamentary election of 2000. The

relationships forged during this movement between NGOs, donors and NGOs, and the media and

NGOs offer a rich description of the network.

For the purposes of illustrating the usefulness of network analysis in advising

relationship building among organizations, we will focus on the six top-rated and most important

organizations in the civil society movement (USAID, 2000). Respondents included the Croatian

office of the United States Agency for International Development, USAID. This organization

opened in 1997 in Zagreb, Croatia and provided millions of dollars in civil society initiatives.

GONG, the Croatian acronym for "Citizens Organized to Monitor Elections," is a coalition for

election monitoring that coordinates close to 7000 volunteers, mostly from NGOs, to help

Croatians navigate a complicated election, registration, and parliamentary system. GLAS 99 is

Croatian for Voice 1999. Its role was to coordinate all NGO and media strategies for the 2000

parliamentary campaign. The independent media outlet, Radio 101, is based in Zagreb and is

considered the most influential media outlet in the nation. According to USAID (2000), its

programming is critical, informative, and unbiased. The Women's Ad Hoc Coalition was also

prominent in the parliamentary election effort. It served to coordinate women's groups around

the nation. Finally, the politically controlled media outlet, HRT (Croatian Radio and Television)

was included in the study to show how state controlled media outlets can contribute to or

impede civil society initiatives.

In the civil society movement there were interactions between (1) NGOs with other

NGOS, (2) donors and NGOs, and (3) different types of media and NGOs. Network analysis

conducted on the entire inter-organizational system included measures of structural holes, degree

centrality, and betweenness centrality. Taken together, this provides a picture of the nature of

the emergent communication relationships. Specifically, we point to the network measures to

make sense of which organizations worked together, which have highly prominent locations (e.g.,

high centrality measures), and which are the liaisons in the information flows. In other words,

the network measures will provide insight as to which organizations are more influential,

powerful, and relied upon for reducing uncertainty in their volatile environments. These

measures have both pragmatic and theoretical relevance for public relations practitioners and

scholars. They provide practitioners with new concepts to consider as they forge relationships

with other organizations. Moreover, these measures provide one more tool for public relations

scholars to tap into the dynamics of relationships.

Steps for Gathering Network Data

Identification of system. The first step in conducting a network analysis involves

identifying what entities constitute the system that will be analyzed. In this case, we identified

key partners in the democratic movement with the help of USAID, the key funding agency of Croatian NGOs.

Survey construction. Once the organizations that make up the system were identified, we created a roster of all the organizations. The survey also contained (1) questions for rating the extent to which each responding organization communicated with each of the other organizations in the system; (2) the channels through which they made such communication connections; and (3) to what extent did the each responding organization rate others on the roster in terms of how important they believed each of the other organizations were in the civil society movement.

Data collection. Each organization was solicited to have various members complete surveys. In this way, the organizational representatives' answers could be aggregated in order for their answers to represent the organization's behaviors; not the idiosyncratic behaviors that represent one personality or role within the organization. In the Croatian data, there were no outlying behaviors. Rather, organizational representatives' surveys showed that behaviors were consistent among responses and therefore, inter-subjectivity was accomplished. Under circumstances where there are inconsistencies among organizational representatives' responses, we recommend that you encourage the organizational members to complete the surveys together and remind them that the goal of the survey is to identify organizational representation, not the idiosyncratic behavior of one individual.

Deriving measurements. Representatives of Croatian NGOs and media organizations were asked to answer a short paper-and-pencil survey that provided data for calculating the following measures. First, degree centrality was ascertained by interviewing representatives of the 17 organizations that were active in the 2000 parliamentary election campaign (USAID,

2000). For each organization, the representative was asked to rate on a scale from 0 (not at all

important) to 10 (very important) the value of their communication relationship with each

organization.   Degree centrality breaks down the extent to which members are senders and

receivers of this importance value. In-degree centrality is a more specific analysis than degree

centrality because it takes the direction of the connection into account. In-degree measures the

extent to which a focal organization receives links from others in the system. So, the more the

other organizations agree that the focal organization is important and merits a high rank, the

higher the in-degree centrality.

A second area of interest for studying networks is betweenness centrality. High

betweenness centrality indicates the extent to which an organization connects pairs of other

organizations. Krackhardt (1992) suggested using the betweenness centrality measure in the

UCINET computer program (Borgatti et al., 1992; Freeman, 1979) and describes an actor with

"high betweenness is in a position to act as gatekeeper for information that flows through a

network. Moreover, betweenness is an indication of the non-redundancy of the source of

information" (p. 223). In an ideal network, organizations do not have to communicate with every

organization to achieve goals. Instead, they should strategize connections so that their direct

links might provide them indirect access to other organizations.

Third, the existence of structural holes was examined. The structural holes option in the

UCINET computer program reports measures of *effective size*, *efficiency*, *constraint*, and

hierarchy (for extended discussion, see Burt, 1992a). Effective links provide access to

organizations beyond the initial contact. *Effective size* measures the extent to which the focal

organization's contacts provide access to contacts beyond the direct one. As Burt (1992) argues,

"these ports should be nonredundant so as to reach separate, and therefore more diverse, social worlds of network benefits" (p. 69). Effective size is measured by the number of contacts an organization has beyond their initial contact and ranges from zero up to the total number of other members in the system (in this case, 16). The greater the value, the more effective the connection. This is different from betweenness centrality because it does not necessarily indicate that the focal organization is a liaison. Efficiency refers to a contact that connects an actor to a subgroup by way of a single member of that subgroup (as opposed to having multiple contacts to the same subgroup). It is calculated by taking the organization's effective size and dividing by the number of alters in the network.

Burt's constraint measure considers the extent to which the focal organization is invested in organizations that are invested in the 'others' of the focal organization's alters (Borgatti, et al. 1992). Scores vary from zero to one, where scores closer to zero indicate many redundant contacts and one means only one contact. As Susskind et al. (1998) explain, it is "positively related to the formation of structural holes, as high constraint indicates more structural holes" (p. 36). Its algorithm includes the constraint measure and ranges from zero to one, where zero means equal constraint from all contacts and one means that constraints come from one contact. Hierarchy indicates the extent to which constraint on the focal organization is concentrated in a single other organization (Borgatti, et al. 1992). The hierarchy algorithm includes the constraint measure and ranges from zero to one, where zero refers to an equal distribution of communication among all contacts and one means that communication comes from just one contact. Taken together, these four measures — effective size, efficiency, constraint and hierarchy — identify where structural holes exist in the civil society network.

In sum, this study was an examination of three aspects of inter-organizational networks -
-communication impact, importance, and structural holes. These three network analysis
procedures in the UCINET program enable an examination of the relationships among the
partners of civil society that show us how inter-organizational relationships, created and
maintained by communication, are played out in a civil society movement.

<div align="center">Results</div>

In order to study the three different interactions, NGO-NGO, Donor-NGO, and NGO-
Media, we conducted three types of analyses, including in-degree centrality, structural holes, and
betweenness centrality. The complete system results are reported in Anonymous (forthcoming),
so for the purposes of this illustration, we will present the results of only the focal organizations
that exemplified the three different interactions.

Table 1 provides the actual values for the organizational in-degree centralities, and shows
that USAID (an international donor organization) was the most frequently contacted
organization by other organizations in the system. The media organizations including the state-
run HRT and independent Zagreb Radio 101 received the fewest communication contacts from
other organizations with a degree centrality of 54. It is important to note that strength of
connections is represented in the degree centrality measure, which is why the number far exceeds
the number of alters in the system (n = 16).

Table 2 provides the four values that together provide an indicator of structural holes in
the system. This analysis reveals that there are few structural holes in the NGO-Media-Donor
system, as seen by contrasting effectiveness and efficiency values with the constraint and
hierarchy values. For example, while GONG and GLAS 99 had effective size values of 10.25

and 10.49, and HRT's value was 5.56, the efficiency scores are all fairly equal with small

constraint and hierarchy measures. These values indicate a moderately redundant network with

few constraints.

Table 3 provides the betweenness centrality results with GLAS 99 having the highest

betweenness centrality and the governmental media organization, HRT, with the lowest.

Betweenness scores indicate that GLAS 99 and GONG act as liaisons in the system to a greater

degree than the other organizations. The media organizations (HRT and Radio 101) differed from

each other in that the government run media (HRT) had relatively low betweenness score (.83)

while independent media Radio 101 was 4.43, indicating the greater liaison role of the

independent media.

Taken together, the results of the three types of analysis provide a picture of the

relationships these organizations have with each other and the extent to which some

organizations emerged as more relied upon as key communicators in the system. The next

section discusses the results and offers considerations about the roles that these relationships

played during the civil society effort.

<p align="center">Discussion</p>

NGO Inter-Organizational Interactions

Beginning with structural holes and betweenness centrality, we are able to identify

organizations that are connected in the network in an efficient – but relatively redundant – way.

Table 2 and Table 3 indicate the liaisons or gatekeepers of information among groups. GONG

and GLAS 99 were reported to have the most effective and efficient connections in the system

(i.e., structural holes analysis results). GONG and GLAS 99's betweenness centrality were the

two highest in the entire network; meaning, they were connected to those organizations that

provided indirect links to other organizations. Together, structural holes and betweenness

centrality identified GONG and GLAS 99 as having effective reach to others and served as

liaisons in the communication network.

The Women's Ad Hoc Coalition's role in the network also shows relatively more

efficient and effective relationships and high degree centrality than the other organizations.

Additionally, it did not cluster directly with GONG and GLAS 99. This group's high in-degree

centrality measure indicates that collectively all of the organizations agreed that they are highly

important and rank high on the one-to-ten scale. The effective/efficiency measure indicates that

the Women's Ad Hoc Coalition provided indirect links to other organizations in the network.

This reveals an important role that this women's organization played in this particular movement

such that other organizations relied on them as information providers. This coalition coordinated

the activities of dozens of small, women's organizations from both urban and rural areas.

Although many of Women's Ad Hoc Coalition's member organizations were not politically

motivated, member organizations were able to fully participate in the civil society movement.

Funding organizations like USAID can benefit from knowing that such an organization is

prominent (high degree centrality) in working with other organizations. As past network

research has shown, the high centrality implies Ad Hoc's highly influential role in the system

(Burt, 1992; Mizruchi & Galaskiewicz, 1993). GONG, GLAS 99, and the Women's Ad Hoc

Coalition were all short-term coalition organizations yet coalitions such as GONG, GLAS 99 and

the Women's Ad Hoc Coalition served important functions in the Croatian civil society

movement. In the network of 17 organizations, coalitions emerged as effective and efficient

connections in the system. These coalitions brought together a large number of organizations

under their leadership and helped maintain communication throughout the network. They linked

previously unlinked organizations and maximized efforts by coordinating the actions of many

small NGOs. Future civil society efforts should focus on creating a strong network of single-

issue organizations under the umbrella of coalitions. This is an important role for public

relations.

Donor-NGO Relationships

USAID, as the major INGO in Croatia from 1997-2000, ranked very low on efficient and

effective connections (from the structural holes analysis). Table 2 shows that USAID had

multiple and redundant communication with organizations through out the system, despite the

fact that some of their links could have provided them indirect connections to other

organizations. The highly redundant nature of USAID's role is corroborated by the fact that

they had the highest degree centrality—all the organizations forged strong links with USAID.

This is not surprising since USAID was one of the major donor organizations that funded the

civil society initiative, and these organizations were highly dependent as USAID's grantees. The

grantees relied on USAID for mentoring and guidance in their efforts. This is not to suggest that

USAID should reduce its redundant links. Rather, the data suggest that having USAID in the

network had a positive impact on the civil society movement, as providers of monetary

resources, mentors, and relationship coordinators among the civil society partners. The network

analysis shows that USAID had regular contact with all of the organizations in this study and

through redundant links it was able to help mentor these organizations through their first serious

attempt at civil society mobilization.

In future civil society initiatives donor organizations should continue to foster cooperative relationships among the network of NGOs. In the beginning of civil society transitions donors should stay in contact with their grantees. However, by arranging cooperative ventures, collaborative projects, and by identifying and training future leaders, donor organizations can have a long-term impact on civil society in a particular nation.   To accomplish this goal, donors such as USAID should adapt a program where veteran organizations become mentors to newly funded groups. This would lessen the burden on the donor and further strengthen the civil society in the developing nation. This decentralization would disperse power and created connected civil society organizations.

Media-NGO Relationships

Looking to the media-NGO relationships, HRT and Radio 101 provide an interesting dichotomy. HRT is the government-run television and radio station and Radio 101 is the newly formed and most independent media outlet in Croatia. These two media outlets' network roles reveal that HRT's connections are highly redundant (based on the structural holes measures) and Radio 101's are relatively efficient and effective (structural holes). However, they have the exact same degree centrality measures and their betweenness centralities differ— HRT's is very low (i.e., their connections do not mediate groups of other organizations) while Radio 101's betweenness centrality is nearly as high as the betweenness measures for GLAS 99and GONG. Taken together, these measures provide pause for speculation about the collective perceptions of the two media outlets. Having highly redundant and inefficient connections is a strong indicator that organizations do not trust the government-run organization, HRT. On the other hand, though the results show that organizations rely heavily on Radio 101, there is not a need for

redundancies, indicating they trust information from their liaisons and do not need to go directly

to the source. Their high betweenness measure and the fact that they shared significant

communication with the coalitions (GLAS 99, GONG, USAID) implies their central and

therefore influential role in the civil society movement.

An effective civil society effort, like effective public relations efforts, requires

communication and cooperation with media. All over Croatia, independent media outlets are

competing with state controlled media for public attention and respect. The objective

programming and news content has helped many of these independent stations provide balanced

and fair information during crucial times. The public enjoys having access to the alternative

media (USAID, 2000). During the last three years Croatians have noticed a difference in media

coverage of political news. There are now adequate media outlets and programming for those

people who seek alternative perspectives. NGOs need to develop relationships with all media

outlets--both state controlled and independent. These relationships will help create the

information subsidy that will allow NGOs to participate in agenda setting and framing.

Implications for Building Public Relations Theory

The purpose of this paper was to introduce network analysis as an additional tool for

public relations scholars as they strive to theorize and measure relationships. Through a case

study of a civil society movement in Croatia, we can see how network analysis allows us to see

the inter-organizational linkages, structural holes, and centrality of some types of organizations.

By looking to the structure of relationships in Croatia – where cooperative efforts resulted in a

positive outcome – we are able to learn three fundamental aspects of inter-organizational

communication relationships: (1) Donor organizations must expect to be available to their

grantees for guidance and mentoring; (2) coalitions need to work closely with other coalitions and the donor organizations (in this case, USAID) so that they function as liaisons without being over burdened by being connected to all other organizations; and (3) government-run media can expect to be watched closely by the constituency they serve including the coalitions, NGOs, and other organizations actively working toward civil society. Specifically, network analysis reveals the liaisons and regularly contacted organizations that worked together to foster fair elections in Croatia.

The next step in the development of a public relations model of civil society is to identify ways to study, test, and measure the relationships advocated by this model. Further research may identify new partners, refine the concept of reciprocal relationships, and better operationalize how public relations contributes to the advancement of civil society. There are several implications for public relations theory and research inherent in this study. First, public relations theory has been moving toward relational communication models and network analysis is uniquely situated to study inter-organizational relationships. Second, as the appreciation of international public relations and public relations for nation building grows, public relations scholars now have a way to measuring relationships in civil society efforts. Finally, increased interest in international development issues also shows that the field is moving toward fully understanding its potential impact in the development of a national, and someday, global civil society.

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Table 1

In-Degree Centralities

Organization	In-Degree Centrality (Rank)
USAID	104.00 (1)
GONG	90.00 (2)
GLAS 99	86.00 (3)
Women's Ad Hoc Coalition	59.00 (4)
Radio 101	54.00 (5)
HRT	54.00 (5)
M	48.82
SD	24.83

Table 2

Structural Holes Results for Efficiency and Effectiveness of Multiplex Link Network

Organization	Effect Size	Efficiency	Constraint	Hierarchy
GONG	10.248	0.683	0.249	0.102
GLAS 99	10.492	0.656	0.281	0.145
ADHOC	6.354	0.635	0.266	0.073
RADIO101	7.548	0.581	0.312	0.160
USAID	6.477	0.589	0.299	0.045
HRT	5.555	0.617	0.300	0.105

Table 3

Betweenness Centrality Scores of Multiplex Link Network

Organization	Betweenness Centrality	Rank (out of 17 organizations)
GLAS 99	12.06	1
GONG	9.76	2
RADIO101	4.43	4
USAID	2.36	6
ADHOC	1.38	10
HRT	0.83	13
Mean	2.88	
SD	3.31	